

SUMMARY (Abstract)

ASSAY FOR ANTI TRANSGLUTAMINASE ANTIBODIES DETECTION USEFUL IN CELIAC DISEASE DIAGNOSIS.

A non-instrumental assay for the diagnosis of celiac disease based on the general immunochromatographic assay principles. The assay is rapid and simple and allows the reliable detection of anti transglutaminase antibodies, of both IgA and IgG isotype, in samples of human serum, plasma or blood, using as tracer the antigen transglutaminase conjugated to a colored substance, like colloidal gold or colored latex particles. The conjugated antigen is deposited onto an inert fibrous support, from where it can be released by a liquid sample. The antibodies in the sample react with the conjugated antigen developing an immunocomplex that migrates through a carrier membrane, like nitrocellulose or nylon with a pore size that allows a laminar flow of the reagents, until it reacts with the same antigen transglutaminase immobilized onto a reactive zone of the membrane. As a consequence of this reaction the immunocomplex will be trapped in the reaction site and a colored signal will be seen. Therefore a visually detectable signal in the reactive zone of the membrane indicates a positive result for the detection of anti transglutaminase antibodies in the sample.